

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reissue application of:

Douglas Ross CARDY, *et al.*

Patent No. 6,041,109

Reissue Not yet assigned

Appln. No.:

Filed: December 19, 2000

For: Telecommunications System Having
Separate Switch Intelligence and
Switch Fabric

Art Unit: Not yet assigned

Examiner: Not yet assigned

Atty. Docket: CCK94028

Preliminary Amendment

Commissioner for Patents
Washington, DC 20231

Sir:

Prior to the examination of this Reissue Application, please amend the above-identified application as follows:

IN THE CLAIMS:

Please add the following new claims:

9. An apparatus comprising:

a switch-fabric proxy service for providing a normalized interface between a switch fabric and a switch intelligence for all communications involving said switch fabric by interfacing to said switch fabric with any one of a plurality of application programming interfaces and interfacing to said switch intelligence with a uniform application programming interface.

204210-5424501

10. An apparatus according to claim 9, wherein said plurality of application programming interfaces is at least one of vendor-specific and switch-fabric-specific.

11. An apparatus comprising:

a switch fabric; and

a switch-fabric proxy service for providing a normalized interface between said switch fabric and a switch intelligence for communications involving said switch fabric.

12. An apparatus according to claim 11, wherein said switch fabric is physically separated from said switch intelligence.

13. An apparatus according to claim 11, wherein said switch fabric is logically separated from said switch intelligence.

14. An apparatus according to claim 11, wherein said switch-fabric proxy service interfaces to said switch fabric with any one of a plurality of application programming interfaces and interfaces to said switch intelligence with a uniform application programming interface.

15. An apparatus according to claim 14 wherein each of said plurality of application programming interfaces comprises at least one of a vendor-specific application programming interface and a switch-fabric-specific application programming interface.

16. An apparatus according to claim 11 wherein said switch-fabric proxy service translates switch-fabric communications into switch-intelligence communications.

17. An apparatus according to claim 16 wherein said switch-fabric communications are at least one of vendor-specific and switch-fabric-specific.

2025-01-24 10:54:50

18. An apparatus according to claim 11, wherein said switch-fabric proxy service translates switch-intelligence communications into switch-fabric communications.

19. An apparatus according to claim 18, wherein said switch-fabric communications are at least one of vendor-specific and switch-fabric-specific.

20. An apparatus according to claim 11, wherein said switch-fabric proxy service translates switch-fabric communications into communications defined according to a uniform interface.

21. An apparatus according to claim 11, wherein said switch-fabric proxy service translates communications defined according to a uniform interface into switch-fabric communications.

22. An apparatus comprising:

a switch intelligence for providing control functions to at least one switch fabric;

and

a switch-fabric proxy service for providing a normalized interface, between said switch intelligence and said at least one switch fabric, for communications involving said at least one switch fabric.

23. An apparatus according to claim 22 wherein said switch intelligence is one of logically separated and physically separated from said at least one switch fabric.

24. An apparatus according to claim 22 further comprising a feature processor executing at least one telecommunications function, for interacting with said switch intelligence to thereby provide at least one telecommunications function.

105445-01402

25. An apparatus according to claim 22 wherein each of said plurality of application programming interfaces comprises at least one of a vendor-specific application programming interface and a switch-fabric-specific application programming interface.

26. An apparatus according to claim 22 wherein said switch intelligence provides control functions to a plurality of switch fabrics.

27. An apparatus according to claim 22 wherein said switch intelligence further comprises at least one of a facility service, a call connection manager service, and a call segment instance service.

28. An apparatus according to claim 27 wherein said at least one of a facility service, a call connection manager service, and a call segment instance service is distributed over a plurality of network elements.

29. A switch-fabric proxy service comprising:

means for translating switch-fabric communications into switch-intelligence communications; and

means for translating switch-intelligence communications into switch-fabric communications.

30. A switch-fabric proxy service comprising:

means for translating switch-fabric communications into communications defined according to a uniform switch-intelligence interface; and

means for translating the communications defined according to the uniform switch-intelligence interface into switch-fabric communications.

31. A switch-fabric proxy service according to claim 30, further comprising:

means for translating communications defined according to the uniform interface into switch-intelligence communications; and

means for translating switch-intelligence communications into communications defined according to a uniform interface.

32. An apparatus comprising:

a switch-fabric proxy service that is capable of at least one of translating switch-fabric communications into switch-intelligence communications, translating the switch-intelligence communications into the switch-fabric communications, translating the switch-fabric communications into communications defined according to a uniform switch-intelligence interface, and translating the communications defined according to a uniform switch-intelligence interface into the switch-fabric communications.

33. An apparatus according to claim 32, wherein said proxy service includes a normalized interface between a switch fabric and a switch intelligence.

34. The apparatus according to claim 32, wherein said switch intelligence is one of logically separated and physically separated from said switch fabric.

35. An apparatus according to claim 32, further comprising a switch fabric including said proxy service.

36. An apparatus according to claim 32, further comprising a switch intelligence including said proxy service.

37. An apparatus according to claim 32, wherein said switch-fabric proxy service includes an application programming interface for interfacing with a switch fabric.

38. An apparatus according to claim 32, wherein said application programming interface is at least one of a vendor-specific interface and a switch-fabric-specific interface.

39. An apparatus according to claim 32, wherein said switch-fabric proxy service includes an application programming interface for interfacing with a switch-intelligence.

40. An apparatus comprising:

a switch intelligence for controlling a switch fabric, said switch intelligence physically separate from the switch fabric and couplable to a feature processor that executes at least one telecommunications function, wherein said switch intelligence comprises all aspects of data processing required to complete a bearer request.

41. An apparatus according to claim 40, wherein said switch intelligence further comprises at least one of a facility service, a call connection manager service, and a call segment instance service, wherein said at least one of a facility service, a call connection manager service, and a call segment instance service is distributed over a plurality of network elements.

42. The apparatus according to claim 40, wherein said switch intelligence includes at least one of a first application programming interface communicable with a switch-fabric proxy service and a second application programming interface communicable with the feature processor.

43. The apparatus according to claim 40, further comprising at least one application programming interface communicable between said at least one of a facility service, a call

connection manager service, and a call segment instance service and another of said at least one of a facility service, a call connection manager service, and a call segment instance service.

44. An apparatus comprising:

a feature processor for executing at least one telecommunications function; and

an application programming interface communicating with said feature processor,

wherein said application programming interface translates feature processor communications into at least one of communications defined according to a uniform interface and switch-intelligence communications.

45. An apparatus for coupling at least one switch fabric having a control interface to at least one switch intelligence for controlling the switch fabric, the switch intelligence being physically separated from the switch fabric, comprising:

a switch-fabric proxy service including a first interface communicable with the switch fabric, the first interface being compatible with the switch-fabric control interface, and a second interface communicable with the switch intelligence by which the switch intelligence controls the switch fabric.

46. The apparatus of claim 45, wherein the second interface is an application programming interface accessible to processes running in a computing environment of the switch intelligence.

2025-01-24 10:05:45

STATUS OF CLAIMS AND SUPPORT FOR CLAIM CHANGES:

Claim 1-8 of the reissue application are pending and new claims 9-46 are being added to the application by way of this preliminary amendment. Thus, claims 1-46 are now pending in the application.

Claims 1-8 of the original issued patent, directly or indirectly, each recite the presence of a switch fabric, a switch intelligence, a switch fabric proxy service, and a feature processor. The patent specification, however, repeatedly states that these elements may be separate or independent from each other or may be present in various subcombinations. The drawings likewise provide support for these elements being separate or independent from each other or being present in various subcombinations. In fact, the switch fabric proxy service recited in claim 1 was the sole limitation cited by the Examiner in the reasons for allowance.

New claims 9-10, 29-39, and 45-46 recite the switch fabric proxy service as a patentably distinct entity. The switch fabric proxy service is disclosed and described in the patent specification at, for example, col. 5, lines 6-12; col. 5, line 64 – col. 6, line 15; col. 7, lines 50-67; and col. 8, line 46 – col. 9, line 8. At col. 9, lines 63-67, the specification very clearly states that the switch fabric proxy service may be a stand-alone product supplied by a different vendor than other items such as the Call Segment Instance Service, the Facilities Service, or the Connection Management Service. The application programming interfaces are described and support by the specification at, for example, col. 4, lines 10-43.

New claims 11-21 recite a switch fabric proxy service in combination with a switch fabric. The switch fabric proxy service is described in the specification at, for example, col. 5, lines 6-12 and col. 5, line 64 – col. 6, line 15. The switch fabric is described in numerous places in the specification, including, but not limited to col. 4, lines 1-9 and col. 5, lines 43-63. The

actual combination of the switch fabric proxy service with the switch fabric is supported by the specification at, for example, col. 5, lines 6-12 of the specification.

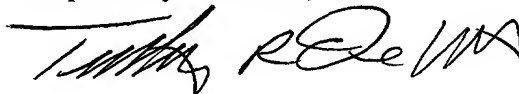
New claims 22-28, for example, recite the switch fabric proxy service in combination with a switch intelligence, the combination of which is discussed, for example, at col. 4, line 66 – col. 5, line 2 and col. 6, lines 1-4 of the specification. The switch intelligence is described and supported in detail in the specification at, for example, col. 3, lines 56-67; col. 4, line 64 – col. 5, line 5; col. 5, lines 43-63; and col. 9, lines 50-62. New claims 40-43 provide various recitations of the switch intelligence as supported by at least the above-referenced portions of the specification.

New claim 44 recites a feature processor of the present invention which is described in the specification at, for example, col. 4, line 63 – col. 5, line 2; col. 6, lines 57-65; col. 10, lines 12-26; and col. 10, line 47 – col. 11, line 19.

In view of the foregoing, applicants respectfully request consideration, examination, and allowance of claims 1-46.

The Commissioner is hereby authorized to charge any additional fees associated with this communication to our Deposit Account No. 01-2510.

Respectfully submitted,



Timothy R. DeWitt (Reg. No. 35,857)

Date: January 24, 2002

ARNOLD & PORTER
555 12th Street, N.W.
Washington, D.C. 20004
703.720.7011 telephone
703.720.7399 facsimile